

APR 20 1981

## Manufacturers' Shipments, Inventories, and Orders

**JANUARY 1981** 

M3-1/81I-1

For Wire Transmission 2:30 P.M. E.S.T. Wednesday March 4, 1981

U.S. Department of Commerce BUREAU OF THE CENSUS

(All figures in text below are in seasonally adjusted current dollars.)

New orders for manufactured products in January declined \$0.5 billion or 0.3 percent from December to \$161.6 billion the Department of Commerce, Bureau of the Census reported today. This is the first decline in new orders since the 4-month series of declines recorded in February through May of last year.

New orders for manufactured durable goods in January were down \$1.5 billion or 1.9 percent to \$81.1 billion. The largest decline was reported in the primary metals category, where steel orders dropped \$1.6 billion or 24 percent to \$5.2 billion. This is the third consecutive monthly decline for that industry and the largest reported since a 27 percent drop in March 1975. The volume of steel orders for January 1980 was \$5.8 billion and January 1979, \$7.3 billion.

The other major decline in durable goods new orders came from the transportation equipment industry, which decreased \$1.1 billion or 6.3 percent to \$16.1 billion. Most of the drop was caused by declines in the shipbuilding and motor vehicle industries.

New orders for machinery showed a large increase for January. Electrical and nonelectrical machinery orders were up 7.8 percent and 7.4 percent, respectively, with nearly all types of machinery showing order increases.

Within the capital goods industries, new orders for nondefense capital goods were up \$2.2 billion or 10.3 percent to \$23.9 billion, reflecting both machinery and commercial aircraft order increases. Orders for defense capital goods dropped 29 percent following a 31 percent increase last month.

Shipments of manufactured goods in January increased \$1.8 billion or 1.1 percent to \$161.1 billion. The increase in the petroleum industry of \$2.0 billion or 12.8 percent to \$17.3 billion more than offset declines reported by many durable and nondurable industries. The largest declines within the durable goods category were in steel shipments, down \$0.5 billion or 7.0 percent to \$6.2 billion; and motor vehicles, down \$0.3

billion or 3.3 percent to \$9.3 billion. Within the nondurable goods category, shipments by the chemical industry were down \$0.6 billion or 3.8 percent to \$15.0 billion, following a 10.4 percent increase in December.

Manufacturers' backlog of orders showed a small increase for the month of \$0.5 billion or 0.2 percent to \$291.3 billion. The only significant increases occurred in the machinery categories where the unfilled orders level for the nonelectrical category increased \$0.8 billion or 1.4 percent, and for the electrical category \$0.8 billion or 1.9 percent. The backlog of steel orders declined in January \$1.0 billion or 5.3 percent.

The book value of manufacturers' inventories in January rose \$4.5 billion or 1.9 percent to \$249.0 billion. This is the largest 1-month percentage increase since the 2.3 percent recorded in December 1974. Within the durable goods categories, industries showing increases of greater than 3.0 percent were aircraft, up \$1.2 billion or 5.1 percent; steel, up \$0.4 billion or 3.3 percent; and motor vehicles, up \$0.2 billion or 3.2 percent. Within the nondurable goods category, 5 of the 10 major industries reported increases larger than 3.0 percent.

By stage of fabrication, both the raw materials and work in process categories increased significantly. The value of raw materials rose 2.3 percent, while work in process went up 2.7 percent. The value of finished goods inventories increased only 0.3 percent.

The figures on the durable goods industries in this report supersede those issued earlier in the advance report on durable goods. The present report is based on more complete reporting, but the estimates are also considered preliminary. Final figures will appear as historical data in the report to be published for next month. The advance report on durable goods for February is scheduled for release on March 20, 1981, and the full report is scheduled for release on March 31, 1981.

Address inquiries concerning these figures to U.S. Department of Commerce, Bureau of the Census, Industry Division, Washington, D.C. 20233, or call Ruth Runyan or Kathleen Swindell, (301) 763-2502.

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Table 1. VALUE OF MANUFACTURERS' SHIPMENTS FOR INDUSTRY GROUPS, MARKET CATEGORIES, AND SUPPLEMENTARY SERIES

							SHOTTI IMA	or dorrars)				:						
				Season	Seasonally adjusted	pe						No	Not seasonally adjusted	ly adjuste	*p			
			Monthly	11y		9	Quarterly					Monthly	1y				Annual	11
In	Industry	,						;		Last 4 m	months		Last	4 months	a year ago			
		Jan. 1981	1980r	1980	1980	1980	1980	1980	Jan. 1981P	Dec. 1980r	Nov. 1980	0ct. 1980	Jan. 1980	Dec. 1979	Nov. 1979	Oct. 1979	1980	1979
OT	TOTALS																	
manufactur	All manufacturing industries	161,110	159,323	157,722	156,697	473,742	445,085	426,684	148,210	152,455	156,659	162,189	139,629	139,658	143,286	150,754	1,798,539	1,692,001
anuracturing excluding to	Manufacturing industries excluding transportation	145,618	143,486	141,605	140,264	425,355	400,510	386,151	134,159	137,444	140,121	144,527	125,776	125,698	127,976	133,933	1,619,352	1,497,540
infilled or	unfilled orders	82,847	82,642	82,133	81,636	246,411	231,534	224,205	75,311	79,659	81,486	84,424	73,071	73,390	74,937	79,380	941,448	893,021
ble goods	Durable goods industries	80,369	80,027	79,741	79,497	239,265	221,172	210,706	72,335	76,053	78,679	82,721	70,187	70,347	72,706	78,660	902,723	887,777
orders	orders	67,073	968'99	66,411	066'59	199,297	185,402	179,104	959 09	64,525	65,584	67,956	58,514	59,377	990'09	63,949	757,071	722,730
lurable goo	Nondurable goods industries	80,741	79,296	77,981	77,200	234,477	223,913	215,978	75,875	76,402	77,980	79,468	69,442	69,311	70,580	72,094	895,816	804,224
rders	orders	15,774	15,746	15,722	15,646	47,114	46,132	45,101	14,655	15,134	15,902	16,468	14,557	14,013	14,871	15,431	184,377	170,291
MARKET	MARKET CATEGORIES																	
goods and	Nome goods and apparel	11,511 28,683	11,251	11,406 27,911	11,649	34,306	32,790	31,961	9,881	9,914	11,984	13,016	9,918	9,766	11,237	12,189	133,379	125,723 298,916
pment and cept automot	Equipment and defense products, except automotive	23,213	22,771	22,894	22,765	34,916	31,439	64,298	20,776	23,589	22,196	22,922	18,938	21,743	19,467	20,714	263,897	236,754
struction ma	Construction materials, supplies, and intermediate products	13.761	13.613	13.370	13.266	672.07	35, 992	33.546	11.356	12,356	13.062	13.889	11.092	11.423	12.543	13.637	147.692	148.806
ermediate	Other materials, supplies, and intermediate products	72.747	71.172	70.542	69.216	210.930	194,460	191.641	000 69	67.978	69.140	69,923	62.019	61.118	62,216	64.078	801,557	730.782
SUPPLEMEN	SUPPLEMENTARY SERIES <sup>2</sup>																	
7 6 4 4																		
estal goods :	tries	5,204 25,842 22,325 3,517	5,009 25,498 21,772 3,726	4,998 25,716 21,858 3,858	5,212 25,618 21,842 3,776	15,219 76,832 65,472 11,360	14,501 73,869 63,294 10,575	13,928 72,176 62,015 10,161	4,443 23,257 20,048 3,209	4,640 26,432 22,456 3,976	5,202 25,284 21,497 3,787	5,786 25,758 21,967 3,791	4,393 21,645 18,836 2,809	4,384 24,205 20,804 3,401	4,957 22,434 19,344 3,090	5,485 23,416 20,355 3,061	58,835 296,226 254,381 41,845	55,938 267,807 232,315 35,492
USTRY GROUP	INDUSTRY GROUPS AND INDUSTRIES	_																
one, clay, roducts Glass cont imary meta	Stone, clay, and glass Stone, clay, and glass products. Glass containers Primary metals. Blast furnaces, ateel mills.	4,590 425 12,534 6,172	4,567 412 12,586 6,635	4,383 398 12,284 6,286	4,285 402 11,797 5,776	13,235 1,212 36,667 18,697	12,281 1,224 32,184 14,221	11,550 1,113 31,392 14,353	3,803 380 11,664 5,894	3,968 374 11,305 5,819	4,331 381 11,515 5,733	4,640 399 11,777 5,603	3,756 326 12,208 5,605	3,576 310 10,699 4,927	4,132 354 11,203 5,321	4,552 360 12,073 5,754	49,509 4,617 137,984 64,447	48,185 3,989 140,122 68,663
metals bricated m	Metal Care branch	5,187	4,863	4,905	4,944	14,712	15,135	14,074	4,704	4,518 9,573	4,709	5,028	5,495	4,750	4,809	5,131	60,946	58,001 109,463
druma chinery, ex Engines and	Machinery, except electrical. Engines and turbines	890 15,418 1,376 1,205	895 14,729 1,135 1,145	797 14,650 1,184 1,169	813 14,749 1,203 1,165	2,505 44,128 3,522 3,479	2,360 42,099 3,297 3,281	2,387 40,734 3,266 3,076	724 14,027 1,254 1,140	708 14,922 1,138	668 13,997 1,108	790 14,825 1,132 1,238	718 12,736 1,122 1,039	13,742 969 984	714 12,527 1,006 828	806 13,911 1,163 1,222	9,806 169,318 13,362 12,967	10,046 157,695 13,156 13,258
Construction material was alworking Seneral inc	Construction, mining, and material-handling equipment. Metalworking machinery	2,787 931 1,149	2,676	2,448	2,573	7,697 2,903 3,722	7,658 2,584 3,584	7,676	2,628 826 1,026	2,478	2,318	2,591	2,617	2,502 846	2,279 841	2,799	31,534 10,789 14,463	31,813 9,497 13,245

See footnotes at end of table.

VALUE OF MANUFACTURERS' SHIPMENTS FOR INDUSTRY GROUDS, MARKET CATEGORIES, AND SUPPLEMENTARY SERIES--Continued Table 1.

							(MILLION)	s of dollars	-									
				Seasor	Seasonally adjuated	ted						Not	Not seasonally adjusted?	adjusted 2				
			Mont	Monthly			Quarterly					Monthly	A				Annual	
SIC	Industry					:		*		Last 4 m	months		Last	4 months a	year ago			
		Jan. 1981 <sup>p</sup>	Dec. 1980 <sup>r</sup>	1980	1980	1980	1980	1980	Jan. 1981P	Dec. 1980r	Nov. 1980	Oct. 1980	Jan. 1980	Dec.	Nov. 1979	Oct. 1979	1980	1979
	INDUSTRY GROUPS AND INDUSTRIES																	
	Durable goods and industries																	
36 361,2	Electrical machinery	10,627	10,384	10,813	10,747	31,944	30,742	29,819	9,734	10,375	10,952	11,229	9,204	9,720	9,614	9,790	123,390	110,713
363	Industrial apparatus	1,640	1,845	1,829	1,773	3,648	5,142	3,050		1,745	1,803					1,720	20,984 13,544 8,498	19,915
366	Communication equipment Electronic components	3,148	3,020	3,185	3,230	9,435	5,518	5,499		3,141	3,151	3,202	2,598	3,183	2,797	2,769	36,995	32,143
371	Transportation equipment Motor vehicles and parts	15,492	9,607	629'6	9,936	29,222	26,243	22,722	8,785	8,487	10,144					11,338	106,030	129,364
37.210	parts	4,338	4,508	4,685	4,769	13,962	12,942	12,550	3,686	4,791	4,711	4,667	3,219	670'7	3,684	3,607	51,134	43,804
3795	tank vehicles	870	773	248	691	2,212	2,459	2,459	752	873	760	751	169	976	763	829	9,738	8,693
381-4 386	Scientific and engineering photographic goods	3,674 2,137 1,363	3,735 2,207 1,329	3,629 2,102 1,356	3,620 2,061 1,392	10,984 6,370 4,077	10,463 5,994 3,946	9,944 5,734 3,693	3,308 2,018 1,136	3,714 2,167 1,377	3,759 2,098 1,483	3,771 2,104 1,473	3,030 1,832 1,034	3,248 1,928 1,151	3,304 1,837 1,247	3,242 1,824 1,181	42,026 24,156 15,750	36,253 21,082 12,757
24 25 39	All other durable goods industries	960'8	7,956	7,921	7,965	23,842	21,936	20,753	6,797	7,185	7,845	8,507	6,832	6,795	7,585	8,588	89,843	90,885
20 201	Nondurable goods industries: Food and kindred products Meat products	22,412	22,378	22,115	21,825	66,318	65,186	59,809	21,086	22,204	22,427	22,672 5,637	18,903	20,352	20,518 5,163	20,883	252,071 60,124	234,828 62,002
207	Fats and oils	1,858	1,858	1,852	1,723	5,433	5,070	4,377	1,832	1,815	1,896	1,732	1,599	1,558	1,666	1,667	19,866	19,322
21 21 22	To	1,185	1,264	1,171	1,231	3,666	3,542	3,344	1,135	1,281	1,206	1,290	1,002	1,052	1,078	1,097	13,781	12,173
26	Paper and allied products	6,205	6,201	6,005	6,055	18,261	17,791	17,239	5,837	5,720	5,926	6,160	5,705	5,156	5,540	5,745	33.462	66,033
265	Paperboard containers	1,366	1,395	1,335	1,356	4,086	3,867	3,867	1,285	1,264	1,319	1,437	1,302	1,110	1,229	13,25	15,913	14,557
28	Chemicals and allied products Industrial chemicals, ex-	14,999	15,589	14,121	14,161	43,871	39,699	38,234	13,881	14,301	13,359	13,977	12,918	12,533	12,515	12,759	162,390	149,181
283,4	cept pigments Drugs, soap, and tolletries Petroleum and coal products	5,339 4,020 17,329	5,256 4,286 15,361	4,803 3,678 15,590	4,991 3,874 15,038	15,050 11,838 45,989	13,200 11,802 42,639	13,154 10,968 43,724	5,061 3,799 17,234	4,951 4,020 15,748	4,554 3,604 15,565	4,777 4,083 14,877	4,658 3,322 13,827	4,331 3,502 13,489	4,425 3,406 12,779	4,312 3,603 12,302	56,003 45,303 175,533	51,793 40,147 134,041
e :	Rubber and plastics products,	3,646	3,574	3,810	3,796	11,180	11,088	10,236	3,315	3,239	3,694	3,992	3,677	3,279	3,532	3,947	43,995	44,742
23	All other nondurable goods industries	10.796	10,934	11,109	11,067	33,110	32,044	31,268	009'6	10,085	11,665	12,197	9,596	9,664	10,559	11,060	128,272	116,234
4																		

Ppreliminary. Revised.

and inventories are the totals for the period and are adjusted for trading-day and calendar-month variations; unfilled orders and inventories are as of the end of the period and are not adjusted for trading day or calendar-month variations.

Are supplementary series are regroupings of the separate industry categories as followa:

Household durable goods industries--Household furniture; kitchen articles and pottery; handtools, and hardware; household appliances; radio and TV; ophthalmic goods, watches, and clocks; and miscellaneous personal goods. Capital goods industries--Comparable to the previous producers' capital goods and the defense producta (old aeriea) categoriea.

Nondefense products---dachinery, except electrical (excluding farm machinery and equipment and machiner shops), electrical machinery (excluding household appliances, radio and TV, and electronic components), and the nondefense portions of shibbuilding and repairing and relative dequipment, advertage and advertage and relative and shipbuilding, and repairing and shipbuilding.

Defense products---Based on separate reports on defense work filed by large defense contractors in the following industries: Ordnance, communication equipment, aircraft and aircraft parts, and shipbuilding. The data are comparable to those published annually in the MA-175, "Shipments to Federal Government Agencies" (formerly "Shipments of Defense-Oriented Industries"), for the specified industries.

TABLO 2. VALUE OF MANUFACTURERS' NEW ORDERS FOR INDUSTRY GROUPS, MARKET CATECORIES, AND SUPPLEMENTARY SERIES

1				1979		1,732,015	,515,492	933,035	926,580	761,533	805,435	171,502	633,933		126,005	258,447	149,383	079,670		55,939 299,216 259,721 39,495		48,145 142,882 69,121	59,802 111,622 163,304 13,174	32,301 11,486 13,491
		Annual		1980		1,809,772 1,7	1,620,580 1,5	952,681 9	914,731 9	7 670,697	895,041 8	183,602 1	9 665,117		132,744 1 324,792 2	275,139 2 125,609 1	146,812	804,676 7		58,385 310,613 255,638 55,025		49,186 138,680 65,461	61,144 110,702 167,648 13,208	31,887 10,562 13,453
						153,346 1,80	34,085 1,62	81,972 95	81,256 91	66,545 76	72,090 89	15,427 18:	56,663 71		11,822 13 26,817 32	23,109 27 12,900 12	13,266 14	65,432 80		5,080 5, 26,987 31: 22,560 25 4,427 5		4,325 4, 11,880 13, 5,349 6	5,297 6 9,690 114,245 16 11,256 1	3,029 3 1,025 1 1,193 1
			ago	0ct. 1979																				
	ted1		ıs a year	Nev. 1979		144,297	127,956	75,948	73,197	60,557	71,100	15,391	55,709		10,868	20,849	12,307	62,917		4,561 24,221 20,447 3,774		4,072 10,932 5,174	4,675 8,758 13,093 888	2,228 951 1,096
	lly adjus		st 4 months	Dec. 1979		142,086	126,056	75,818	73,106	62,136	68,980	13,682	55,298		9,479	23,988	11,660	61,489		4,194 26,420 22,571 3,849		3,562 10,903 4,654	5,205 8,964 13,802 1,081	2,734 867 977
	Not seasonally adjusted 1	113	Last	Jan. 1980		145,943	129,982	79,385	76,232	64,559	69,711	14,826	54,885		9,935	22.236 10,364	10,836	68,339		4,434 25,823 22,277 3,546		3,914 13,669 6,180	6,227 8,330 14,153 1,169	2,977
	No	Monthly		Oct. 1980		165,762	146,673	766,78	86,228	71,463	79,534	16,534	000' £9		12,740	25,099	14,042	71,260		5,508 28,127 22,428 5,699		4,641 13,193 6,663	5,404 10,379 15,116 1,426	2,896 836 1,229
			months	Nov. 1980		155,859	140,256	80,686	78,070	64,975	77,789	15,711	62,078		11,708 28,356	21,347 12,140	12,873	69,435		4,880 24,462 20,327 4,135		4,278 12,100 6,540	4,481 9,614 13,985 1,102	2,332 749 1,184
			Last 4 mc	Dec. 1980r		154,798	138,645	82,002	78,431	66,903	76,367	15,099	61,268		9,781	25,886 10,066	12,382	160,89		4,559 27,889 22,026 5,863		3,922 12,183 6,169	5,016 9,754 15,021 1,157	2,916 901 1,128
				Jan.		.51,724	36,090	78,826	75,825	64,147	75,899	14,679	61,220		9,968	23,741	11,395	691,69		4,537 26,576 22,128 4,448		3,837 11,401 5,629	4,713 8,988 14,943 1,321	3,060 809 1,216
or dollars)			:	1980		420,815 1	376,313	218,336	206,198	74,596	214,617	43,740	170,877		31,466	66,295	33,196	86,251		13,633 75,478 61,705 13,773		11,184 27,000 11,361	13,267 25,271 37,437 2,911	6,766 2,411 2,867
SUCTION		Quarterly	-	1980		7 975,644	401,522 3	235,995 2	225,417 2	89,647	224,129 2	46,348	177,781		32,675	68,499	35,450	197,326 1		14,347 77,178 61,839 15,339		12,131 34,777 16,620	15,436 26,046 41,925 3,298	7,745 2,254 3,237
		Qua				478,986 44	853	655	394	,426 1	234,592 22	,229 4	,363 17		34,143 84,890	70,708	40,376	213,490   19		14,959 1 78,326 7 64,140 6		13,261 39,673 21,038	15,358 1 30,519 2 44,7:3 4	8,420 2,568 3,633
	usted			1980			430,	251	244	204		47	187											
	Seasonnlly ndju			1980		158,054	143,047	82,993	80,693	67,186	77,361	15,807	61,554		11,535	22,514 12,073	13,552	70,433		5,081 24,526 20,618 3,908		4,386 13,745 7,183	5,478 10,121 14,806 1,310	2,899 851 1,234
	Seaso	1y	5	1980		158,775	142,818	83,186	81,047	67,717	77,728	15,469	62,259		11,359	23,121 11,760	13,158	71,480		4,873 26,302 21,849 4,453		4,379 13,029 7,071	4,872 9,884 14,822 1,323	2,505 764 1,226
		Monthly		1980r		162,157	144,988	85,476	82,654	69,523	79,503	15,953	63,550		11,249	25,073	13,666	71,577		5,005 27,498 21,673 5,825		4,496 12,899 6,784	5,008 10,514 15,100 956	3,016 953 1,173
			100	1981P		161,626	145,544	83,363	81,106	67,810	80,520	15,553	196,49		11,586	25,492	13,549	71,105		5,325 28,069 23,915 4,154		4,512 11,131 5,166	4,836 9,781 16,224 1,593	3,176 977 1,328
			Industry		TOTALS	Monte of the state	Manufacturing industries	unfilled orders	Durable goods industries	Orders goods with unitable	Nondurnble goods industries	Industries with unlilled	Orders	MARKET CATEGORIES	Home goods and apparel	equipment and acterise products, oxcept automotive	Construction materials, supplies, and intermediate products	Untermediate products	SUPPLEMENTARY SERIES <sup>2</sup>	Household durable goods indus- tries Capital goods industries Nondefense.	INDUSTRY GROUPS AND INDUSTRIES	Dura St Pr	Fa	Material-banding equipment. Metalworking machinery
			SIC																			32 33 331	35	354 356

See footnotes nt end of table.

Table 2. VALUE OF MANUFACTURERS' NEW ORDERS FOR INDUSTRY GROUPS, MARKET CATEGORIES, AND SUPPLEMENTARY SERIES--Continued

				1979			115,785	20,653	12,758	14,076	0,416	16,523	962,796	8,964	37,149	91,170
		Annual				-										
				1980			127,506		13,602				62,897	12,415	42,380	
				Oct. 1979			10,047		1,115				6,338	955	3,290	8,518
	1p		a year ago	Nov. 1979			9,387	1,644	1,000	2,693	1,614	16,341	5,158	700	3,244	7,370
	ly adjuste		4 months	Dec. 1979			9,837	1,519	1,057	3,282	1,660	16,030	6,286	686	3,359	6,649
	Not seasonally adjusted 1	.1y	Last	Jan. 1980			10,062	1,647	200,1	3,115	1,926	15,961	5,547	744	3,251	6,892
	No	Monthly		Oct. 1980			11,738	1,897	892	3,910	1,787	19,089	5,929	266	3,726	8,346
			months	Nov. 1980			11,094	1,665	765	3,623	1,963	15,603	3,847	634	3,641	7,755
			Last 4 m	Dec. 1980r			10,344	1,744	1,082	3,432	1,485	16,153	5,336	1,513	3,944	7,110
(1)				Jan. 1981P			10,811	1,882	089	3,634	1,725	15,034	4,924	1,020	3,243	896*9
(Millions of dollars)			:	1980			30,700	5,369	1,907	10,029	5,276	44,502	19,574	2,427	6,779	20,325
(M11110ng		Quarterly	11	1980			30,444	696.47	2,234	9,712	4,950	48,024	14,748	4,457	10,401	21,669
		O'	) A	1980			33,122	5,506	2,189	10,780	5,564	48,133	12,907	3,041	11,090	23,868
	Seasonally adjusted		+ 00	1980			11,098	1,851	732	3,532	1,925	13,007	3,286	716	3,581	7,949
	Seasona	y	a CN	1980			11,459	1,750	672	3,900	2,020	15,457	4,624	636	3,600	7,917
		Wonthly	Doc	1980r			10,565	1,905	785	3,348	1,619	17,169	4,997	1,689	3,909	8,002
			Tan	1981P			11,394	1,861	858	3,800	1,700	16,082	5,029	888	3,658	8,324
			Industry		INDUSTRY GROUPS AND INDUSTRIES Continued	Durable goods industries Continued	Electrical machinery Electrical transmission and distribution couloment and	industrial apparatus	Radio and TV	Communication equipment	Electronic components	Aircraft, missiles, and	Shipbullding and military	tank vehicles	products	All other durable goods industries
			SIC				36	676	365	366	367	372,6	3731	3795	00	39

reliminary, Revised

1 Shipments and new orders are the totals for the period and are adjusted for trading-day and calendar-month variations; unfilled orders and inventories are as of the end of the period and are not adjusted for trading-day or calendar-month variations.

The supplementary series are regroupings of the separate industry categories as follows:

Capital goods industries—Comparable to the previous producers' capital goods and the defense products (old series) categories.

Nondefense products—Machinery, except electrical (excluding farm machinery and equipment and machine shops), electrical machinery (excluding pants and parts and equipment, arcraft and aircraft parts, and orchance.

Set subpublishing and repairing and realroad equipment, communication equipment, parts, and aircraft parts and contracted on separate reports on defense work filed by large defense contractors in the following industries; Ordance, communication equipment, aircraft parts, and shipbuilding. The data are comparable to those published annually in the MA-175, "Shipments to Federal Government Agencies" (formerly "Shipments of Defense-Oriented Industries"), for the specified industries.

TABLO 3. VALUE OF MANUFACTURERS' UNFILLED ORUGES FOR INDUSTRY GROUPS, MARKET CATEGORIES, AND SUPPLEMENTARY SERIES

							(Millions	(Millions of dollars)										
					Seasona	Seasonally adjusted	p						Not	Not seasonally adjusted <sup>1</sup>	ly adjuste	d.		
			Mon	Monthly				Quarterly						Monthly	ıly			
310	Industry											Last 4 m	months		Last	it 4 months	a year ago	
		Jsn. 1981P	Dec. r	1980	0ct. 1980	1111	11 1980	1 1980	1079	1979	Jan.	Dec.,	Nev. 1980	Oct, 1980	Jan. 1980	Dec. 1979	Nov. 1979	Oct. 1979
	TOTALS																	
	All manufacturing industries,,	291,260	290,735	287,907	286,849	285,497	281,044	286,907	279,710	273,033	291,883	288,372	286,027	286,830 2	283,465	277,153	274,721	273,707
	mandancturing industries oxcluding transportation,	177,862	177,930	176,434	175,216	172,439	171,433	181,265	176,804	174,193	176,850	174,923	173,720	173,588 1	177,912	173,713	173,347	173,363
	Durable goods industries,,,,,,,,,	280,492	279,746	277,124	275,813	274,622	270,383	274,884	267,879	261,742	281,261	277,772	275,393	276,003 2	271,821	265,777	263,015	262,521
	Nondurable goods industries.,.,.	10,768	10,989	10,783	11,036	10,875	10,661	12,023	11,831	11,291	10,622	10,600	10,634	10,827	11,644	11,376	11,706	11,186
	MARKET CATEGORIES																	
	Home goods, apparel and consumer staples	3,960	3,934	3,928	3,988	4,120	4,247	4,717	4,630	996*7	3,720	3,627	3,761	7,060	4,295	4,223	4,515	4,907
	Equipment and defense products, except nutomotive	166,757	164,410	162,043	161,652	161,670	159,412	159,073	154,999	150,912	168,037	164,819	162,481	163,091	58,416	155,241	153,125	152,182
	Construction materials, supplies, and intermediate products,,,,,	19,799	20,003	19,957	20,168	19,883	20,423	20,771	20,910	21,130	19,804	19,765	19,738	19,928	20,391	20,648	20,411	20,648
-	Other materials, supplies, and intermediate products,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	100,744	102.382	101,979	101,041	99,824	96,962	102,346	171,66	96,026	100,322	100,161	100,047	1 157, 66	100,363	97,041	96,670	95,970
	SUPPLEMENTARY SERIES <sup>2</sup>																	
	Household durablo goods indus- tries	3,093 195,847 134,609 61,238	2,971 193,616 133,017 60,599	2,975 191,621 133,120 58,501	3,100 191,031 133,127 57,904	3,233 192,126 134,355 57,771	3,387 188,821 135,810 53,011	3,680 185,519 136,118 49,401	3,475 179,310 131,819 47,492	3,923 172,754 126,755 46,000	2,843 197,105 134,893 62,212	2,748 193,785 132,815 60,970	2,830 192,328 133,245 59,083	3,152 193,150 134,415 58,735	3,240 183,532 135,004 48,528	3,199 179,356 131,567 47,789	3,385 177,142 129,800 47,342	3,780 175,353 128,695 46,658
	INDUSTRY GROUPS AND INDUSTRIES																	
3.3	Durable goods industries:	000	0 5 7 0		639 6	C	200	9 0 6	2 013	0	0 787	0 7 0	00%		000	2 770	2 703	2 R K 2
33 331	4	29,335 29,335 18,091	30,738	30,425	29,680 18,163	27,731	25,139 25,139 14,358	29,528	29,962	30,276	29,171 17,820	29,435 18,085	28,557	27,974 16,928	30,199	28,737	28,534 17,344	28,806 17,491
333-6,9	2.	0 100	0 630		0 707	000	103 0	1000	7000	120 0	0 271	0 953	777	000	702 0	670 0	809	F 77.3
34	Fabricated motal products	27,462	27,617		27,396	27,178	28,027	28,737	28,382	27,976	27,459	27,423	27,241		27,954	28,193	27,836	28,108
35 351	Machinery, except electrical.,.	57,925	57,116		56,573	56,519 16,413	56,695	59,994	58,779	57,585	57,584	56,671	56,570	56,582	59,759	58,343	58,279	57,711 16,832
353	Construction, mining, and	0 150	0		000	100	900	440	7,00	0 0/1	171	0 710	120		217	, B	300	я 176
354	Metalworking machinery,,,	6,968	6,922	6,917	7,124	7,257	7,586	7,298	7,143	6,757	6,871	6,887	6,993	7,181	7,329	7,114	7,093	6,984
320	Concint anduburat muchanoty.	707'0	0,000		0710	7/70	6700	1 6076/	1 9000	6574/	100710	01010	6770	Opra4	1071/	17011	66711	1 3 4 7 0

See footnotes at end of table,

TABLE S. VALUE OF MANUFACTURERS' UNFILLED ORDERS FOR INDUSTRY CHOUPS, MARKET CATECORIES, AND SUPPLEMENTARY SERIES.-CONTINUED

					Seasona	Seasonally adjusted	d						Not	Not measonaily adjusted	adjusted			
			Monthly	thly				Quarterly						Month 1y	11,			
SIC	Industry group			2	•		;		:	) )		Last 4 months	onthe		Las	t 4 months	Last 4 months a year ago	
		1981	1980r	1980	1980	1980	1980	1980	1979	1979	Jan.p	Dec.r 1980r	Nov. 1980	Oct. 1980	Jan. 1980	Dec. 1979	Nov. 1979	Oct. 1979
	INDUSTRY GROUP AND INDUSTRIES																	
36 361, 2	Durnble goods industries Continued Electrical machinery	40,477	39.710	39,531	38,884	38,534	38,830	37,944	35,631	34,858	46,454	39,374	39,406	39,264	36,119	35,265	35,148	35,373
363	distribution equipment and industrial apparatus	8,103	7,883	7,823	7,903	7,825	8,000	7,657	7,531	7,418	384	7,770	372	7,908	7,462	7,423	7,438	7,490
365 366 367 37	Radio and TV.  Communication equipment.  Electronic components  Trunsportnide oquipment.	20,656 10,049 113,398	20,004 10,174 112,805	19,	18,961 10,268 111,633	18,659 10,225 113,058	18,365	17,592	16,123 10,308 102,906	15,803 9,644 98,840	20,861 9,888 115,033	20,131 9,910 113,449	19,840 10,235 112,307	19,368 10,207 113,242	16,721 10,359 105,553	16,209	16,111 9,944 101,374	16,214 9,887 100,344
372,6	parts	90.270	89,578	680*68	89,150	90,632	88,827	81,804	77,929	73,098	91,814	90,575	90,031	90,894	81,141	78,810	76,575	75,102
3795 38	tank volicios	14,051	14,032	13,116	13,228	13,203	11,205	11,237	11,297	11,146	14.010	13.742	13,102	13,229	11,040	11,064	11,023	11,086
25	All other durable goods	3,070	2,841	2,796	2,799	2,817	3,084	3,514	3,317	3,297	2.816	2,644	2,721	2,810	3,114	3,054	3,197	3,411

rRevised. Preliminary.

and new orders are the totals for the period and are adjusted for trading-day and calendar-month variations; unfilled orders and inventories are of the end of the period and are not adjusted for trading-

day or calendar-wonth variations.

The superate industry categories as follows:

The superatery socios recognings of the superate industry categories as follows:

The superatory socios recogning the superate industries and clocks; and miscellaligurabeld anattries--ligurations--liguration articles and pettory; cuttory, handtools, and hardware: household appliances; radio and TV; ophthalmic goods, watches, and clocks; and miscellaligurabeld anattries--ligurations---

Nondefense products -- Machinory, except electrical (excluding farm machinory and equipment and machine shops), electrical machinory (excluding household appliances, radio and TV, and electronic components), the nondefense portions of shiphuliding and repairing and relationed equipment, communication equipment, niveraft and alreraft parts, and ordnince. Capital goods industries --Comparable to the previous producers' capital goods and the defense products (old series) categories.

Defense products -- Based on separate proports on defense work filed by large defense contractors in the fellowing industries: Ordnance, communication equipment, aircraft and aircraft parts, and shipbuilding.

The data are comparable to those published annually in the NA-175, "Shipments to Federal Government Agencies" (formerly "Shipments of Defense-Oriented Industries"), for the specified industries. Atthough the inpact of this change is not known, the use of previously ostably affected associated by seasonal factors were composite seasonal factors were controlled by combining the existing end of fiscal your information with data same factors and factors are follow the controlled fovernment purchasing patterns. Therefore, beginning in July 1977, now composite seasonal factors were developed by combining the existing end of fiscal your information with data for the previous calendar quarter (1.6., one quarter preceding the end of the fiscal your). These composite factors were applied to the unfilled viewer data for each of the separately tubulated defense industries. This adjustment also medified the new orders data. Similar adjustments could not be made for nondefense Covernment orders sense and not compiled supparties.

Table 4. VALUE OF MANUFACTURERS' INVENTORIES FOR INDUSTRY GROUPS, MARKET CATEGORIES, AND SUPPLEMENTARY SERIES

				0ct. 1979		222,296	192,623	153,073	146,672	136,339	75,624	16,734		16,825	58,937 11,472	18,676	86,074		8,646 65,829 57,019 8,810		5,310 548 19,006 10,619	7,031	1,246 35,443 2,558 2,805	8,017 2,261 3,449
			a year ago	Nov. 1979		225,134	194,898	155,154	148,857	138,341	76,277	16,813		16,634	60,412	18,861	87,761		8,670 67,429 58,231 9,198		5,385 541 19,354 10,747	7,243	1,317 36,018 2,634 2,846	8,255 2,266 3,523
11			st 4 months	Dec. 1979		227,658	198,147	156,529	150,321	139,439	77,337	17,090		16,960	61,060	19,348	89,647		8,880 67,927 58,666 9,261		5,541 536 20,153 11,257	7,525	1,360 36,530 2,689 3,096	8,289 2,298 3,606
	seasonally adjusted	Monthly	Last	Jan. 1980		233,547	203,159	160,445	154,097	142,947	79,450	17,498		17,496	62,903	19,581	92,575		9,088 69,906 60,457 9,449		5,723 548 20,390 11,337	7,650	1,494 37,428 2,676 3,182	8,506 2,378 3,653
		Mont		oct. 1980		241,622	207,268	166,561	158,497	148,425	83,125	18,136		17,325	68,948	19,099	94,852		8,781 77,173 65,619 11,554		5,725 557 19,967 10,948	7,723	1,143 38,025 2,448 2,836	8,334 2,543 3,615
2	NOT		months	Nov. 1980		242,730	208,166	167,349	159,260	149,177	83,470	18,172		17,064	69,383	19,104	95,465		8,710 77,687 65,962 11,725		5,743 567 20,162 11,006	7,880	1,165 38,332 2,555 2,773	8,425 2,529 3,610
			Last 4	Dec. 1980 <sup>r</sup>		243,730	200,002	168,144	160,308	149,895	83,422	18,249		17,464	69,251	19,725	96,336		8,854 77,292 65,510 11,782		5,955 550 20,634 11,309	8,000	1,286 38,227 2,512 2,811	8,345 2,459 3,626
				Jan. 1981P		250,202	213,617	173,039	164,884	154,106	85,318	18,933	-	18,034	70,825	20,158	195,461		9,060 79,574 67,324 12,250		6,197 564 21,154 11,549	8,252	1,465 38,660 2,539 2,896	8,383 2,472 3,751
			111	1979		221,341	192,703	152,449	146,048	135,537	75,293	16,912		17,459	58,296	18,943	85,970		8,852 64,996 56,443 8,553		5,436 564 19,033 10,457	7,166	1,397 35,527 2,630 2,913	8,099 2,238 3,520
			1.1	1979		228,258	198,342	158,073	151,689	140,633	76,569	17,439		17,584	61,621	19,646	89,311		9,180 68,640 59,178 9,462		5,643 547 19,803 10,834	7,563	1,554 36,624 2,701 3,108	8,150 2,314 3,650
		Quarterly	-	1980		238,522	207,075	164,509	157,127	146,068	81,395	18,441		18,168	64,718	20,166	94,867		9,311 72,177 62,102 10,075		5,987 597 20,387 11,151	7,848	1,502 37,609 2,703 3,114	8,308 2,436 3,671
SHOTTINE		5	11	1980		243,630	210,942	168,682	160,404	149,701	83,226	18,981		18,286	67,819	19,954	905,76		9,267 75,370 64,782 10,588		6,141 593 20,884 11,751	7,741	1,439 38,940 2,558 3,195	8,739 2,560 3,725
Tr. od turktod			111	1980		243,615	209,665	168,621	169,091	150,081	82,924	18,540		17,845	69,213	19,649	96,490		9,058 77,401 66,091 11,310		5,920 554 20,187 11,045	7,807	1,267 39,107 2,496 3,154	8,589 2,544 3,715
a florogod?	Seasona		\$	1980		242,876	208,586	168,135	160,137	149,599	82,739	18,536		17,882	69,615	19,491	95,590		9,014 77,805 66,158 11,647		5,976 563 20,055 10,850	7,848	1,346 38,582 2,453 3,027	8,539 2,553 3,663
		1y	NO.N	1980		244,090	209,549	169,064	160,977	150,428	83,113	18,636		17,880	69,813	19,704	95,847		9,002 78,117 66,284 11,833		5,994 574 20,148 10,854	7,967	1,372 38,691 2,553 2,947	8,562 2,526 3,654
		Monthly	0	1980r		244,493	209,264	169,949	161,907	151,325	82,586	18,624		18,118	69,967	20,035	95,951		9,155 78,209 66,171 12,038		6,067 563 20,285 10,884	8,040	1,468 38,352 2,529 2,822	8,206 2,476 3,670
				1981p		249,021	212,343	173,510	164,983	154,304	84,038	19,206		18,351	71,101	20,083	98,758		9,222 80,063 67,625 12,438		6,137 572 20,851 11,246	8,244	1,525 38,548 2,539 2,831	8,284 2,462 3,725
			Industry		TOTALS	All manufacturing industries	Manufacturing industries ex- cluding transportation	Manufacturing industries with unfilled orders	Durable goods industries	Durable goods with unfilled orders	Nondurable goods industries	Nondurante goods with unfilled orders	MARKET CATECORIES	Home goods and apparel	Equipment and defense products.  except automotive	Construction materials, supplies, and intermediate products	Other materials, supplies, and intermediate products	SUPPLEMENTARY SERIES	Household durable goods indus- tries. Capital goods industries. Nonde fense.	INDUSTRY GROUPS AND INDUSTRIES	Durable goods industries: Stone, clay, and glass products Glass containers. Primary metals.	Nonferrous and other primary metals	Metal cans, barrels, and drums	Construction, mining, and material-handling equipment. Netalworking machinery
			SIC																		32 322 33 331	333-6, 9 34	341 35 351 352	353 354 356

See footnotes at end of table.

Table 4. VALUE OF MANUFACTURERS' INVENTORIES FOR INDUSTRY GROUPS, MARKET CATEGORIES, AND SUPPLEMENTARY SERIES--Continued

					1 1 1 1 0	# 4 A A A A	7			_								
					Seasona	Seasonally adjusted	g.						Not	seasonall	seasonally adjusted			
			Monthly	٨			Ör .	Quarterly						Monthly	ıly			
	Industry						:		:			Last 4 mc	months		Last	t 4 months	a year ago	
		Jan. 1981P	1980r	1980	1980	1980	1980	1980	1979	1979	Jan. 1981	Dec. 1980 <sup>x</sup>	Nov. 1980	Oct. 1980	Jan. 1980	Dec. 1979	Nov. 1979	Oct. 1979
	INDUSTRY GROUPS AND INDUSTRIES																	
H O	Durable goods industries Continued																	
(a)	Electrical machinery	22,594	22,135	22,107	22,140	22,095	21,861	21,620	20,598	19,462	22,264	21,763	21,799	21,908	20,726	20,241	19,804	19,610
	industrial apparatus	3,924	3,904	3,867	3,928	1,893	1,998	3,868 2,161	3,770	3,637	3,918	3,888	3,838	3,897	3,813	3,758	3,720	3,691
	Communication equipment	8,694	8,437	8,558	8,521	8,426	7,992	7,741	7,095	6,588	8,580	8,348	8,550	8,519	7,301	7,021	6,903	6,763
(ma)	Transportation equipments  Motor vehicles and parts	36,678	35,229	34,541	34,290	33,950	32,688	31,447	29,916 8,012	28,638	36,585	34,655 7,251	34,564	34,354	30,388	3,068 29,511 7,980	2,976 30,236 8,812	29,673 29,673 9,135
	Aircraft, missiles, and parts Shipbuilding and military	24,691	23,502	22,844	22,754	22,136	20,589	19,049	17,417	15,549	24,439	23,066	22,710	22,619	17,783	17,102	16,883	16,157
	tank vehicles	2,608	2,577	2,595	2,486	2,383	2,386	2,130	2,165	2,034	2,500	2,430	2,627	2,513	2,060	2,052	2,221	2,108
	products Scientific and engineering Photographic goods	8,463 5,991 2,044	8,438 6,051 1,965	8,448 6,019 2,005	8,353 5,953 1,979	8,290 5,890 1,982	8,393 5,859 2,083	8,237 5,597 2,155	7,765 5,291 1,986	7,471 5,021 1,941	8,449 6,033 1,999	8,248 5,972 1,862	8,294 5,934 1,945	8,274 5,899 1,959	8,021 5,417 2,136	7,580 5,217 1,885	7,500 5,142 1,878	7,447 5,050 1,907
	All other durable goods	12,234	12,166	12,131	12,149	12,279	12,046	12,181	11,936	11,766	12,266	11,991	11,892	11,941	12,150	11,768	11,715	11,660
	Nondurable goods industries: Food and kindred products Meat products	20,953	21,362	21,756	21,527	21,337	20,272	20,431	20,397	19,780	21,730	21,999	22,875	22,546	21,011	21,024	21,096	20,797
	Fats and oils.	1,895	2,035	2,284	2,303	2,321	1,764	1,627	1,913	1,718	2,074	2,271	2,556	2,303	2,134	2,141	2,100	1,820
	Tobacco products	3,632	3,524	3,771	3,723	3,722	3,529	3,506	3,503	3,762	3,868	3,749	3,832	3,742	3,771	3,727	3,652	3,696
	Paper and allied products	7,772	7,478	7,473	7,443	7,475	7,598	7,296	6,795	6,422	7,718	7,399	7,394	7,348	6,859	6,722	6,566	6,458
	Pulp, paper, etc	2,796	2,656	1,879	2,751	2,755	2,656	1,980	2,319	2,143	1,987	2,650	2,687	2,724	2,352	2,313	2,236	2,178
	All other paper containers Chemicals and allied products	2,965	2,897 18,516	2,887 18,610	2,830	2,817	2,912	2,881	2,568	2,445	2,974	2,872	2,853 18,616	2,775	2,608	2,546	2,500	2,483
	pigments Drugs, soap, and tolletries	5,805	5,900	5,994	5,785	5,887	6,453	6,055	5,246	4,975	6,173	6,065	6,042	5,791	5,780	5,398	5,100	5,023
	Rubber and plastics products	460,0	6,390	5,55,0 5,393	0,493	0,094	6,703	290,0	196,0	0,343	6,606	20,702	200,00	750,0	060,1	0,010	000,0	1/6,0
	All other nondurable goods	12,971	12,649	12,709	12,730	12,661	12,832	12,373	11,690	11,859	12,620	12,185	12,077	12,381	11,620	11,270	11,146	11,450

Ppreliminary.

Ashipments and new orders are the totals for the period and are adjusted for trading-day and calendar-month variations; unfilled orders and inventories are as of the end of the period and are not adjusted for

trading-day or calendar-month variations.

The supplementary series are regroupings of the separate industry categories as follows:

The supplementary series are regroupings of the separate industry categories and pottery; cutlery, handtools, and hardware; household appliances; radio and TV; ophthalmic goods, watches, and clocks; and miscellameous personal goods.

Capital goods industries—Comparable to the previous producers and equipment and machine shops), electrical and anchinery (excluding fram machiners) and defense products—Machinery, except electrical (excluding fram and equipment, aircraft and aircraft parts, and ordnance, of shipbuilding and repairing and railrace equipment, communication equipment, of shippuilding in the MA-175, "Shipments to Rederal Government Agencies" (formerly "Shipments of Defense-Oriented Industries"), for the specified industries.

The data are comparable to those published annually in the MA-175, "Shipments to Rederal Government Agencies" (formerly "Shipments of Defense-Oriented Industries"), for the specified industries.

Table 5. VALUE OF MANUFACTURERS' INVENTORIES. DY STAGE OF FABRICATION, DY INDUSTRY GROUP (MIllions of dellars)

				Seasons	onally addusted	po			-			+oN	ullanosos.	by filet od			
		Moathly	1y			9	uarterly						Monthly				
ladustry											Last 4 mc	months		Last	4 months	a year ago	
	Jan. 1981P	Dec. 1980 <sup>r</sup>	1980	0ct. 1980	1980	11 1980	1980	1979	1979	Jan. 1981p	Doc. 1980r	Nov. 1980	Oct. 1980	Jaa. 1980	Dec. 1979	Nov. 1979	oct. 1979
TOTAIS All mnaufacturing industries.	249,021	244,493	244,090	242,876	243,615	243,630	238.522	258				242,730	241,622	233,547	227,658	225,134	222.296
Durable goods industries		161,907	160,977	160,137	160.691	160,404	157,127	689				159,260	158.497	154,097	150.321	148,857	146,672
Stono, clay, and glass products	20,851	20,285	20,148	20,055	20,187	20,884	20,387	19,803	19,033	21,154	20,634	20,162	19,967	20,390	20,153	19,354	19,006
Fabricated metals		38,352	38,691	38,582	39,107	38,940	37,609	624				38.332	38,025	37,428	36,530	36,018	35,443
Transportation equipment		35,229	34,541	34,290	33,950	32,688	31,447	916				34,564	34,354	30,388	29,511	30,236	29,673
lastruments and related products		8,438	12,131	8,353	12.279	12,046	12,181	936				11,892	8.274	8,021 12,150	11.768	7,500	11,660
Nondurable goods industries		82,586	83,113	82,739	82,924	83,226	81,395	698				83.470	83,125	79,450	77.337	76.277	75,624
Chemicals and allied products	19,210	8,396	8,333	8,495	8,894	8,763	8,062	581				8,552	8,837	7,056	6,816	989.9	6,571
Rubber and plastics products, n.o.c.	4,594	4,474	51,777	4,488	6,470	4.817	4,954	777				4.276 52.026	4,366	4,970	4,804	4,698	4,703
MATERIALS AND SUPPLIES																	
All manufacturing industrios	83,764	81,876	80,983	80,861	80,925	82,515	82,314	79,114	75,770	84,299	82,391	80,943	81,055	81,023	79,638	78.432	77,217
Durable goods industries		49,507	48,841	48,722	49,007		50,347	48,857	46,417	51,063	009,64	48,759	49.047	49,712	48,963	48,321	47,683
Stone, clny, and glass products		2,456	2,322	8.018	060'8		7,919	7,411	6,988	8,626	8,398	2,281 8,130	8,161	7,909	7,742	7,464	2,115
Fabricated metals	6,573	10,401	6,332	6,213	6,187		6,835	6,807	6,575	6,559	6.330	6,143	6,156	06.790	6.736	6,579	6,573
Nonoloctrical machinory		6,051	6,081	6,142	6,166		6,222	5,936	5,634	6,227	6,021	5,957	6.074	5,960	5,906	5,680	5,690
Transportation equipment		8,415	7,929	7.725	2,475		8,501	8,351	8,044	8,678	8,171	8,083	8,016	8,132	8,144	8,563	8,542
Instruments and related products		77,477	4,848	4,950	5,050		5,019	066'5	4,932	4,943	4,913	4,901	5.024	5,209	5,029	5.047	4,991
Nondurable goods industries	32,766	32,369	32,142	32,139	31,918	32,338	31,967	30,257	29,353	33,236	32,791	32.184	32,008	31,311	30,675	30,111	29,534
Chomicals and allied products	2,099	1,971	1,991	2,163	2,156		1,839	1,709	1,771	2,115	1,958	1,993	2,200	1,701	1.700	1,845	1,857
Rubbor and plastics products, a.o.c	1,789	1,745	21.715	21,580	21,5/1		1,84/	20,750	20,004	22,197	21,960	21,751	21,401	21,383	21,129	20,437	20,013
WORK IN PROCESS																	
All manufacturing ladustries	89,421	87,033	86,293	85,588			82,272	78,611	15,698	89,125	85,934	85,736	85,298	79,843	77.669		697.92
Durable goods industrices	75,943	74,060	73,733	73,037			69,585	66,837		75,685	73.073	73,124			65.997		64,429
Primary motals	7,302	6,949	6,989	6.796			6,936 A 221	7,013	6,904	7,380	6,935	6,860			7,012		6,779
Nonoloctrical machiaory	17,759	17,409	17,481	17,407			17,451	16,952	16,407	17,902	17,355	17,505			16,908		16,533
Electrical machinery	11,439	11,363	11,244	11,208			10,518 19,155	10,064	9,435	11,352	11,148	11,196			9,862		9,602
Instruments of colored products	3,621	3,879	3,896	3,893	3,792	3,851	3,678	3,445	3,312	3,633	3,783	3,850	3,861	3,533	3,350	3,333	3,312
Nondirection conde deducted	13 678	10 071	12.560	12.551			12.687	11.774	11,888	13,440	12.861	12.612			11.672		12.040
Chemicals and allied products	2,712	2,590	2,527	2,523			2,707	2,444	2,671	2,713	2,602	2,550			2,452		2,616
Rubbor and plastics products, n.o.c	978	789	804	792			869	836	854	869	806	815			853		868
All other nondurable goods industries	7,029	098.49	0./18	6,0,0			0./44	977	164,0	600%	01/40	/0/ '0			0,338		0,543
All manufacturiak industrios	75,836	75,584	76,814	76,427	76,756	76,613	73,936	70,532	69,873	76,778	75,045	76,051	75,269				68,610
Durnble goods industrios	38,042		38,403	38,378	38,475		37,195	35,994	35,821	38,136	37,635	37.377					34,560
Stone, clay, and glass products	2,736		5.253	2,809	5.178		2,850	2,580	2,575	2,777	2,683	2,668					2,422
Fibricated metals	4,876		4,718	4,626	4,741		4,603	4,510	4,424	4,875	4,744	4,643					4,276
Electrical machinery	9,962		4,782	4,790	4,839		4.880	4,598	4,393	4,685	4,594	979'7					4,318
Transportation equipment	3,978		3,949	4,117	4,031		3,791	3,733	3,947	4,113	3,985	3,986					4,024
All other durable goods industries	655.5		4,551	4,525	7,486		4,396	4,337	4,272	4,450	4,290	4,255					4,020
Nondurable goods industries	37,794		38,411	38.049	38,281		36.741	34,538	34,052	38,642	9,155	38,674					34,050
Potroleum and coal productsRubbor and plastics products, n.o.c	3,664	3,691	3,831	3,769	4,122	4.376	3,856	2,824	2,700	3,844	4,039	4,019	4.013	3,265	3,087	2.785	2,701
All other mondurable goods industries	22,715		23,344	23,145	22,898		21,620	21,033	21,023	22,997	22,652	23.568					21,385
Pproliminary. FRowlsed.																	

Table 6. PERCENT CHANGES AND REVISION RATES OF MANUFACTURERS' SHIPMENTS, INVENTORIES, AND ORDERS

(Based on seasonally adjusted data)

			Pe	rcent change	es			Re	vision rate	2
	M	onth-to-mont	th	Avera	ge monthly	rates of ch	uange <sup>1</sup>	Year ago	Average	monthly
Item and industry group	Dec. 1980- Jan. 1981	Nov Dec. 1980	Oct Nov. 1980	Fourth quarter 1980	Third quarter 1980	Second quarter 1980	Jan. 1980- Jan. 1981	Jan. 1980	Jan Dec. 1980	Jan. 1976-1980
Shipments:										
All manufacturing industries	+1.1	+1.0	+0.7	+1.4	+2.6	-1.9	+0.5	+0.4	0.3	0.3
Durable goods industries	+0.4	+0.4	+0.3	+1.5	+3.5	-3.1	+0.3	+0.3	0.3	0.6
Nondurable goods industries	+1.8	+1.7	+1.0	+1.3	+1.7	-0.7	+0.7	+0.4	0.5	0.5
Inventories:								j		
All manufacturing industries	+1.9	+0.2	+0.5	+0.1	-0.0	+0.7	+0.6	0.0	0.1	0.2
New orders:							1			
All manufacturing industries	-0.3	+2.1	+0.5	+1.5	+3.9	-3.0	+0.3	+0.7	0.3	0.6
Durable goods industries	-1.9	+2.0	+0.4	+1.5	+5.9	-5.0	-0.0	+0.7	0.5	0.9
Nondurable goods industries	+1.3	+2.3	+0.5	+1.4	+1.9	-1.1	+0.7	+0.6	0.5	0.6
Unfilled orders:										
Durable goods industries	+0.3	+0.9	+0.5	+0.6	+0.5	-0.5	+0.3	+0.1	0.1	0.2

1Metbod of calculation of these percentages for the quarter and the 12-month time intervals reflect compounded monthly growth rates.

<sup>2</sup>Represents the revision in the percentage change between the preliminary and final estimates. The revision rates between the advance and final estimates for durable goods industries are shown in the advance report for the month.

Table 7. RATIO OF MANUFACTURERS' INVENTORIES TO SHIPMENTS AND UNFILLED ORDERS TO SHIPMENTS, BY INDUSTRY GROUP

(Based on seasonally adjusted data)

Industry group	Inv	entoriess	hipments ra	tio	Unfil:		-sbipments r backlog)	ratio <sup>1</sup>
	Jan. 1981	Dec. 1980	Nov. 1980	Oct. 1980	Jan. 1981	Dec. 1980	Nov. 1980	Oct. 1980
All manufacturing industries	1.55	1.53	1.55	1.55	3.52	3.52	3.51	3.51
Durable goods industries	2.05	2.02	2.02	2.01	4.18	4.18	4.17	4.18
Stone, clay, and glass products	1.34	1.33	1.37	1.40	0.60	0.62	0.66	0.68
Primary metals	1.66	1.61	1.64	1.70	2.34	2.44	2.48	2.52
Fabricated metals	1.96	1.88	1.90	1.88	3.04	2.96	2.99	3.02
Machinery, except electrical	2.50	2.60	2.64	2.62	4.08	4.20	4.21	4.17
Electrical machinery	2.13	2.13	2.04	2.06	3.81	3.82	3.66	3.62
Transportation equipment	2.37	2.22	2.14	2.09	13.34	12.83	12.61	12.48
Instruments and related products	2.30	2.26	2.33	2.31	1.72	1.70	1.70	1.71
Nondurable goods industries	1.04	1.04	1.07	1.07	0.68	0.70	0.69	0.71
Food and kindred products	0.93	0.95	0.98	0.99	(x)	(x)	(x)	(x)
Tobacco products	3.06	2.79	3.22	3.02	(X)	(x)	(x)	(x)
Textile mill products	1.50	1.55	1.49	1.48	(NA)	(NA)	(NA)	(NA)
Paper and allied products	1.25	1.21	1.24	1.23	(NA)	(NA)	(NA)	(NA)
Chemicals and allied products	1.28	1.19	1.32	1.30	(X)	(x)	(x)	(x)
Petroleum and coal products	0.50	0.55	0.53	0.57	(X)	(x)	(x)	(X)
Rubber and plastics products, n.e.c	1.26	1.25	1.15	1.18	(X)	(X)	(x)	(x)

<sup>(</sup>NA) Not available.

<sup>1</sup>Excludes the following industries with no unfilled orders: Wood and lumber products; glass containers; metal cans, barrels, and drums; farm machinery and equipment; motor vehicle assembly operation; other transportation equipment; foods and related products; tobacco; apparel and related products; building paper; die-cut paper and board; chemicals; petroleum and coal products; and rubber and plastics products, n.e.c.

ppreliminary.

r<sub>Revised</sub>.

<sup>(</sup>X) Not applicable.

The following is a description of the survey and definitions used. These are provided to clarify the meaning of the items involved and do not represent any revisions from those definitions previously employed.

### **DESCRIPTION OF SURVEY**

The Manufacturers' Shipments, Inventories, and Orders Survey (M3-1) provides monthly figures that are comparable to the annual totals published each year in the Annual Survey of Manufactures (ASM). The ASM is a probability sample of approximately 70,000 manufacturing establishments drawn from the most recent 5-year census universe of about 312,000 establishments. In the ASM, each manufacturing establishment provides data on employment, payrolls, shipments, cost of materials, capital expenditures, and inventories as well as other selected items. Until 1976, the ASM did not compile information on unfilled orders or new orders. Since the ASM is establishment based, it provides data for each of the 425 manufacturing industries in the Standard Industrial Classification (SIC) system and area data for industry groups.

The estimates presented in the M3 report are based on a sample panel of approximately 5,000 reporting units, consisting of virtually all manufacturing companies with 1,000 or more employees and additional medium-sized companies that strengthen the sample coverage in individual industry cells. The reporting unit for many medium- or single-line companies comprises all operations of the company. Many of the larger diversified companies file separate divisional reports for their operations in different industries, although this divisional reporting is not followed by all large companies.

Each reporting unit in the monthly panel is classified into one of 79 industry classifications for tabulation. Many of the reporting units included mixed industry activity even within the broad industry categories of the monthly survey. However, the survey estimating procedure assumes that the month-to-month changes of the reporting units classified in each industry category effectively represent the month-to-month movements of the establishments in the SIC industries which make up the category. This ratio estimating procedure is used for all items compiled in the survey except for new orders which is discussed separately below.

The M3 series is periodically benchmarked to the ASM for shipments and inventories. The most recent benchmark was for 1974 through 1976. In the absence of benchmark data for unfilled orders, levels were set in August 1962 based upon the ratio of unfilled orders to sales for companies reporting in the M3. These levels were reset as of December 1973. Historical data, 1967-1978, including the seasonally adjusted series, reflecting seasonal factors based on data through December 1978, are published in the M3-1.8 report issued in August 1979.

The M3 data are subject to some limitations primarily resulting from the relatively small sample used to develop the estimates and the use of divisional and company reports to extrapolate establishment based data. Precise measurement of these limitations based on estimates of the sampling errors is not available. In addition to the general limitations of M3 survey data, the estimated levels of unfilled orders are subject to further limitations due to the assumptions made in developing these levels, the definition of unfilled orders, and response

difficulties. These limitations are discussed in greater detail on pages i-iv in the introductory chapter of the latest benchmark publication mentioned above. Generally, the limitations to the unfilled orders data primarily apply to the absolute level of unfilled orders and, to a much lesser extent, to the month-to-month change in unfilled orders. Since this month-to-month change in unfilled orders is used to develop the monthly estimates of new orders, the estimates of new orders are subject to fewer limitations than the unfilled orders estimates.

### **EXPLANATION OF TERMS**

Value of Shipments—Shipments in the monthly survey are equivalent to value of shipments as reported in the ASM which are received or receivable net selling values, f.o.b. plant, after discounts and allowances and excluding freight charges and excise taxes. Included in shipments are the value of all products sold, transferred to other plants of the same company, or shipped on consignment.

Shipments also include receipts of establishments in the industry for contract work performed for other, resales, receipts for miscellaneous activities such as the sale of scrap and refuse; value of installation and repair work performed by employees of the plant; and value of research and development performed at the plant. In the ship building industry the value of work done in a given year varies considerably from the value of shipments because of the long lead time between the input of the materials and labor and the shipments of the completed ship. In the annual survey, therefore, the value of work done during the year is requested rather than the value of shipments. Value of work done is also reported by aircraft and missile producers working on cost-plus contracts.

The value of shipments figures developed from the ASM contain duplication at the all manufacturing and industry group levels since the products of some industries are used as materials by other industries within the industry group. With the exception of motor vehicles, it is not significant at the 4-digit SIC group level. Since the M3-1 industry categories typically are groupings of industries, this duplication is significant for all the manufacturing, durable goods and nondurable goods categories and the various market groups. The significance of the duplication within the specific M3-1 industry groups varies depending on the 4-digit industry composition of these groups. It is most pronounced in a few highly integrated industry areas such as primary metals and motor vehicles and parts.

Since most monthly reports are for the entire company or major divisions rather than establishments, the companies are requested to report net sales, i.e., total company billings after discounts and allowances. Companies which file divisional reports are requested to treat transfers from the division of the company to another as if they were net sales to outside customers. Although this definition of shipments in the monthly reports differs from that used in the annual establishment reports, it is assumed that the month-to-month changes in company sales in the industry are representative of the month-to-month shipments of the establishments in the industry.

Inventories—End-of-month inventories in the monthly survey are identical in definition to the end-of-year inventories in the ASM. In the ASM, respondents are asked to report inventories of individual establishments at approximate current cost if feasible; otherwise, "at book values." Since different methods of inventory valuation are used (LIFO, FIFO, etc.), the definition of the aggregate inventories for establishments in an industry is not precise. The figures on the change in inventories from one period to the next are of greater significance than the actual aggregates.

Inventories are reported by stage of fabrication: (a) finished goods; (b) work in process; and (c) materials, supplies, fuel, and other inventories. In using inventories by stage of fabrication at the all manufacturing and 2-digit industry levels as well as for the durable and nondurable goods sectors, it should be noted that a finished product of one industry may be a raw material for another industry at the next stage of fabrication. Insofar as the durable and nondurable goods sectors and also the 2-digit industry groups contain industries with successive stages of processing, the same type of commodity may be included under different inventory categories in the aggregate statistics.

New Orders and Unfilled Orders—The unfilled orders shown in this publication represent the net sales value of goods on order which have not been shipped. They are net of cancellations and include all adjustments resulting from contract

change documents. Only those orders supported by binding legal documents such as signed contracts or letter contracts are included. Some large defense contracts are authorized and funded in several stages. Only the funded portion of such contracts are included in these figures.

New orders are not calculated according to the standard ratio estimate procedure, even though they are collected as a separate item. The reason for this is that not all companies report new orders, and some that do limit their reporting to specific products for which long lead times are required in the production cycle. These companies, in effect, exclude new orders received for products that are shipped from inventory. To take advantage of the higher response rate for shipments data and to include orders filled from inventory, new orders are computed by adding the change in the backlog of unfilled orders to the current month's shipments. Thus, the estimate of new orders includes orders that are received and filled in the same month as well as orders that have not yet been filled. The estimate also includes the effects of cancellations and modifications of previously existing contracts.

Seasonally adjusted new orders are similarly derived from the monthly change in the seasonally adjusted backlog of unfilled orders and seasonally adjusted shipments. Many nondurable goods industries and some durable goods industries have no backlog of unfilled orders. Shipments are used as the estimate of new orders in these industries.



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